

REMARKS/ARGUMENTS

Claim 1 has been amended to delete the term “pleasant” from the phrase “a pleasant smoky odour.” Claim 1 has also been amended to indicate that the total phenolic content is from about 35% to about 95% (weight/weight), a pH of from about 2.0 to about 5.0, a water content of from about 1 to about 10 wt%, an acids content of from about 0.1 to about 5.0 dry wt% and an average molecular weight (wet)/(dry) of from about (300-450)/(350-500) Daltons and wherein the NR is solid at room temperature.

Support for a total phenolic content up to about 95% may be found in Table 3D: Analysis of V-Additive Lignin found on page 38, lines 14-18 of the description.

Support for the pH of from about 2 to about 5 may be found on page 29, line 15. Support for subject matter pertaining to a water content of from about 1 to about 10 wt% may be found throughout the disclosure, for example page 29, lines 14-15 and claim 5 as originally filed.

Support for the subject matter pertaining to an acids content of from about 0.1 to about 5.0 dry wt% and the average molecular weights may be found on page 29, lines 15-17.

Support for the introduction of a solid NR is found throughout the description, for example page 29, line 14.

Claim 2 has been amended to define the water content of claim 1 to be from about 3 to about 10 wt%, and a melting point from about 70°C to about 150°C. Support for the amendment may be found throughout the disclosure, for example page 29, lines 14-17. A melting point from about 70° to about 150° is supported by the specification, for example page 13, lines 31-33 which discloses the upper value of the 150°C and Table 3A on page 31 which indicates a melting point of 70°C for solid natural resin.

Claims 3-5, and 9-10 have been deleted without prejudice or disclaimer.

Old claim 6 has been amended to depend on claim 1.

Claims 12-14 have been amended to refer to a resin composition rather than an adhesive composition.

Claim 21 has been amended to indicate that the method is for preparing a solid natural resin.

Claim 27 has been amended to refer to the natural resin prepared according to the method of

- i) liquefying wood, wood bark or other biomass using fast pyrolysis in order to produce vapours and char;
- ii) removing said chars from said vapours;
- iii) recovering said vapours to obtain a liquid product; and
- iv) processing said liquid product using distillation/evaporation to produce said NR.

New claim 31 depends on claim 1 and characterizes the natural resin as comprising :

- (a) a water content of about 6 wt%;
- (b) a pH of about 2.5;
- (c) an acid content of about 0.7 dry wt%; and
- (d) an NRP index of about 90.

Support for the subject matter of this claim may be found in Table 3A: Properties of NR, page 31 of the description.

New claim 32 depends on claim 31 and characterizes the natural resin as comprising an average molecular weight of about 388/412 (wet/dry). Support for the subject matter of the claim may be found in Table 3A: Properties of NR, page 31 of the disclosure.

New claim 33 depends on claim 1 and defines the natural resin to comprise a melting point of from about 110°C to about 150°C. Support for the subject matter of this claim is found for example on page 13, lines 31-33 and page 33, line 5, Table 3D: Analysis of V-Additive Lignin.

New claim 34 depends on claim 33 and defines the natural resin to comprise:

- (a) a phenolic content of about 95%;
- (b) a hydrocarbon content of about 0.1%;
- (c) an acid content of about 1%;
- (d) a water content of about 3%; and
- (e) a total ester, aldehyde and alcohol content of about 0.9%.

Support for the subject matter of claim 37 is found on page 38, Table 3D: Analysis of V-Additive Lignin, lines 14 through 18.

New claim 38 depends on claim 37 and characterizes the natural resin as comprising:

- (a) gasoline solubility of about 1%;
- (b) an ash content of about 0.01%;
- (c) a flash point of greater than about 280°C;
- (d) a density of about 1.19 g/cm³ at 25°C;
- (e) a hydroxyl content of about 1.4%;
- (f) a methoxyl content of about 5.3%; and
- (g) a dark brown colour.

The subject matter of this claim is supported by the disclosure, for example page 38, Table 3D: Analysis of V-Additive Lignin, lines 5 through 13.

Claim Objections

The Examiner has objected to claims 27-30 as being dependent upon a rejected base claim. The Examiner notes that the claims would be allowable if rewritten in independent form including all of the limitations of the base claim and intervening claims. Applicant has amended claims 27 to include all the limitations of the base claim (claim 21). As a result of the amendment to claim 27, Applicant believes that the Examiner's objection to claims 28 to 30, which are ultimately dependent on claim 27 is obviated.

Double Patenting

Claims 1-20 are rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 1 to 15 of US Patent No. 6,555,649B2 and claims 1-6 and 21-26 are rejected under the judicially created doctrine of obviousness type double patenting over claims 1-12 of US Patent No. 6,326,461. Applicant disagrees with Examiner. However, in order to overcome the objection, Applicant submits a terminal disclaimer in compliance with 37 C.F.R. § 1.321 (c).

As a result of filing the terminal disclaimer, Applicant believes that Examiner's rejections based upon double patenting are now moot.

Claim Rejections- 35 U.S.C. § Section 112

The Examiner has objected to claims 1-20 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Examiner alleges that the recitation of the term "pleasant" in claim 1 renders these claims as vague and confusing. The Examiner also

notes that recitation of the term "smoky odour" is deemed permissible. Applicant has amended claim 1 to delete the term "pleasant." Applicant requests that the objection to claims 1-20 under 35 U.S.C. § 112 be removed.

CONCLUSION

In view of the above amendments and enclosed Terminal Disclaimers, a Notice of Allowance is requested.

Respectfully submitted,

Dated: _____

4-2-04



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